

**REMARKS**

The Advisory Action of August 31, 2005, withdraws the rejection under 35 USC 112, which is understood to include the objection to the drawing for not showing a spray head that is part of the fire fighting installation now acknowledged. "At least one spray head releasing by impact of heat" as recited in claim 1 is given reference character 4 in paragraph 0017 of the specification and shown in the drawing with reference to such character 4. The "spray head is arranged to spray mist" as recited in claim 2 is also described in paragraph 0017 with reference to character 4 and, therefore, also shown in the drawing.

The rejection of claims under 35 USC 102 or 103 for anticipation or obviousness from the cited Ohta, et al. patent is traversed on the mis-description in the Action of "flow transducer 58" of the patent in relation to the flow transducer of claim 1.

Column 4, line 12, of the Ohta, et al. patent describes "... pressure switch 58."

Column 5, line 8, of the Ohta, et al. patent confirms this description of its "... pressure switch 58 ...."

The pressure switch of the patent is not the flow transducer claimed.

Therefore, the rejection must be based on the personal knowledge of an employee of the office, which entitles the Applicant to call for a support by affidavit under 37 CFR 1.104(d)(2). The Advisory Action fails to provide the affidavit required by 37 CFR 1.104(d)(2).

Having again established as above that the Action mis-describes the patent of the rejection and pointed out the difference of the flow transducer claimed from the pressure switch of the patent, at least the rejection under 35 USC 102 is overcome.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference ... in as complete detail as is contained in the ... claim. MPEP 2131 (citations omitted).

The Advisory Action should have indicated this.

The Action and Advisory Action fail to consider the significance of the difference that overcomes the rejection for obviousness, too. We find from McGraw-Hill Dictionary of Scientific and Technical Terms, Fifth ed., 1994, ordinary meanings just before the date of the invention (2001), that support this.

pressure transducer: An instrument component that detects a fluid pressure and produces an electrical signal related to the pressure. Also known as electrical pressure transducer

flow transmitter: A device used to measure the flow of liquids in pipelines and convert the results into proportional electrical signals that can be transmitted to distant receivers or controllers

transducer: Any device or element which converts an input signal into an output signal of a different form; examples include the microphone, phonograph pickup, loudspeaker, barometer, photoelectric cell, automobile horn, doorbell, and underwater sound transducer

see enclosure.

As we see it, the above definitions tell clearly (also for a person not skilled in the art) that a pressure transducer is not the same as a flow transmitter or a flow transducer.

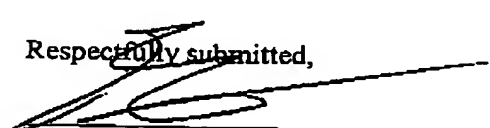
Although Ohta (US '016) mentions "flow detector", Ohta discloses in all places of the document this flow detector to be a "pressure switch".

As described in the present patent application, the different flow transducer of the present invention is based on the problem that the working of a pressure sensor is too slow. This is especially the case where the discharged amount of extinguishing medium is small per time unit (the pressure decrease will be small and slow). Such a situation is present, e.g., in spray nozzles for discharging/spraying water mist and in fire fighting installations having such spray nozzles.

When the aperture of the spray nozzles is small, which is the case when mist nozzles are utilized, it takes, in a fire fighting system having a piping with large dimensions (and a large volume), too much time for the pressure to decrease in the piping from a first initial value when the sprinkler is activated to a second specific second value which is low enough to activate the pressure switch. On the other hand, for practical reasons one cannot either adjust the system to be activated due to a very small pressure drop. A pressure drop may exist in the piping even if no sprinkler has become activated.

Reconsideration and allowance are, therefore, requested.

Respectfully submitted,



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roll

## pressurized stoppings

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roll, a point of maximum positive pressure (center of maximum positive pressure; center of rises; isobaric maximum). ('presh-er, rltz, sen-tar) In plastics-extrusion coating, the roll that applies pressure to the substrate and the molten material. ('presh-er, rltz)

(ENG) A seal used to make pressure-proof the mating surfaces between two parts that have frequent relative rotational or translational motion.

adhesive (MATER) An adhesive that develops bonding power when applied by a light pressure. ('presh-er, ad-hes-iv)

fringe (PETR) In structural petrology, an area of a rock, characterized by a growth fabric of mineral fabric, as seen in a section perpendicular to the fabric. Also known as pressure fringe. ('presh-er, shad-i)

(PHYS) An increase in the wavelength of light as it has maximum intensity, which takes place at a point. ('presh-er, shift)

(PETR) In a sedimentary rock, solution channels that form at the grain boundary surfaces. Also known as pressure solution. ('presh-er, so-lu-shun)

(ENG) Referring to membrane-type pressure vessels, the internal pressure for maintenance of the vessel. ('presh-er, int-er-nal)

(CHEM ENG) A continuous-flow, petroleum-refining process in which heated oil (liquid and vapor) is kept under pressure (decompose into smaller molecules) and the products (pressure distillate or pressure residue) are separated.

(MATER) The storage of a volatile liquid or gas under pressure to prevent evaporation. ('presh-er, stor-aj)

(MATER) A garment designed to provide body heat, respiratory and circulatory functions. Usually, it is made of a material that is resistant to high altitudes or in space without the need for oxygen. ('presh-er, sta)

(MATER) Vapor suppression. ('presh-er, sta-por)

(MATER) A surface. ('presh-er, sta-por)

(MATER) A map. ('presh-er, sta-por)

(MATER) A study to determine the pressure distribution along consecutive lengths or distances. ('presh-er, sta-por)

(MATER) The measurement of pressure in an oil field with producing wells. ('presh-er, sta-por)

(MATER) A system of pipes, vessels, tanks, and interconnections thereof, operating at a pressure greater than atmospheric. ('presh-er, sta-por)

(MATER) A scale feature of atmospheric pressure used to denote either a high or a low pressure. ('presh-er, sta-por)

(MATER) A pressurized tank into which a gas is compressed to exert a pressure. ('presh-er, sta-por)

(MATER) A hole in the wall of a vessel; used for connection with a pressure-measuring device. ('presh-er, sta-por)

(MATER) The character and amount of pressure. ('presh-er, sta-por)

(MATER) Also known as barometric chart. ('presh-er, sta-por)

(MATER) A chart for which plays a role in the measurement of the pressure in a vessel. ('presh-er, sta-por)

pressure thrust (AERO ENG) In rocketry, the product of the cross-sectional area of the exhaust jet leaving the nozzle exit and the difference between the exhaust pressure and the ambient pressure. ('presh-er, thrust)

pressure topography See height pattern. ('presh-er, to-pog-ra-fi)

pressure transducer (ENG) An instrument component that detects a fluid pressure and produces an electrical signal related to the pressure. Also known as electrical pressure transducer. ('presh-er, trans-du-ser)

pressure-travel curve (MECH) Curve showing pressure plotted against the travel of the projectile within the bore of the weapon. ('presh-er, trav-el, korv)

pressure traverse (PETR ENG) Measurement of reservoir pressures at progressive depths. ('presh-er, trav-ers)

pressure treater (CHEM ENG) Any chemical treating device operated at higher-than-atmospheric pressure, as in the chemical and petroleum industries. ('presh-er, tre-tar)

pressure tube (HYD) A deep, slender, cylindrical hole formed in a glacier by the sinking of an isolated stone that has absorbed more solar radiation than the surrounding ice. ('presh-er, tib)

pressure-tube anemometer (ENG) An anemometer which derives wind speed from measurements of the dynamic wind pressure; wind blowing into a tube develops a pressure greater than the static pressure, while wind blowing across a tube develops a pressure less than the static; this pressure difference, which is proportional to the square of the wind speed, is measured by a suitable manometer. ('presh-er, tib, an-o-met-er)

pressure-tube reactor (NUCLEO) A nuclear reactor in which the fuel elements are located inside numerous tubes containing coolant circulating at high pressure; the tube assembly is surrounded by a tank containing the moderator at low pressure. ('presh-er, tib re-ak-tor)

pressure tunnel (CRV ENG) A waterway tunnel under pressure because the hydraulic gradient lies above the tunnel crown. ('presh-er, tan-nel)

pressure ulcer See decubitus ulcer. ('presh-er, ul-ser)

pressure vector (MATH ENG) A stress on the human body produced at the interface between the operator and the equipment during the use of hand tools or other equipment, and described in terms of direction and magnitude. ('presh-er, vek-tor)

pressure vessel (ENG) A metal container, generally cylindrical or spheroid, capable of withstanding bursting pressures. ('presh-er, ves-sel)

pressure viscosity (FL MECH) Property of petroleum lubricating oils to increase in viscosity when subjected to pressure. ('presh-er, vi-sk-i-ty)

pressure wave (METEOROL) A wave or periodicity which exists in the variation of atmospheric pressure on any time scale, usually excluding normal diurnal or seasonal trends. (MATH) See compressional wave. ('presh-er, w-eyv)

pressure welding (MET) Welding of metal surfaces by the application of pressure; examples are percussion welding, resistance welding, seam welding, and spot welding. ('presh-er, weld-ing)

pressurization (ENG) 1. Use of an inert gas or dry air, at several pounds above atmospheric pressure, inside the components of a radar system or in a sealed coaxial line, to prevent corrosion by keeping out moisture, and to minimize high-voltage breakdown at high altitudes. 2. The act of maintaining normal atmospheric pressure in a chamber subjected to high or low external pressure. ('presh-er, to-z-ah-shun)

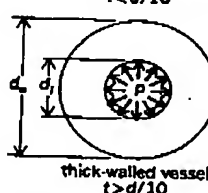
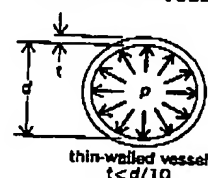
pressurize (ENG) To maintain normal atmospheric pressure in a chamber subjected to high or low external pressures. ('presh-er, tiz)

pressurized blast furnace (ENG) A blast furnace operated under pressure above the ambient; pressure is obtained by throttling the off-gas line, which permits a greater volume of air to be passed through the furnace at a lower velocity, and results in increase in melting rate. ('presh-er, izd 'blast, for-nas)

pressurized cabin (AERO ENG) The occupied portion of an aircraft in which the air pressure has been raised above that of the ambient atmosphere by the compression of the atmosphere into this space. ('presh-er, izd 'kab-en)

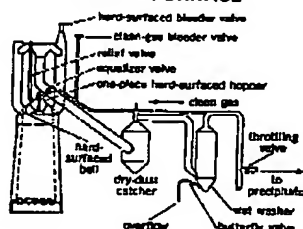
pressurized stoppings (MIN ENG) Stoppings which are erected in the intake and return roadways of a district to isolate

## PRESSURE VESSEL



Pressure vessels for moderate and for high pressure;  $t$  = wall thickness;  $d$  = vessel diameter;  $p$  = pressure;  $d_o$  = inside and outside diameters.

## PRESSURIZED BLAST FURNACE



Flow diagram of a pressurized blast furnace.

U 014961

**fluctuator** [CHEM ENG] A system of tubes in which fluid flows continuously into the vessel and products are continuously removed, in contrast to a batch reactor. ( 'floo-tyoo-ay-er )

**flume** [HYD] A range of streamflows having similar velocity, flow resistance, and means of transporting sediment. ( 'floo-um )

**flue** [FL MECH] 1. Any factor within a conduit or channel that impedes the flow of fluid, such as surface roughness, bends, contractions, or expansions. 2. See viscosity. ( 'floo )

**flue gas** [ENG] An igneous rock that had been liquid. ( 'floo-gas )

**flue gas separator** See boundary-layer separation. ( 'floo-gas-sep-er-ay-er )

**flue gas** See flow chart. ( 'floo-gas )

**flue gas** [MAN ENG] A manufacturing facility in which machines and robots are employed in the same manner on all products. ( 'floo-gas )

**flue gas** [CHEM] A slide of waterlogged material in which the surface is not well defined. ( 'floo-gas )

**flue gas** [ENG] Soldering of printed circuit boards by passing them over a flowing wave of molten solder in a soldering machine permits precise control of the depth of immersion in the molten solder and minimizes heating of the board. ( 'floo-gas )

**flue gas** [CHEM] Deposits of calcium carbonate that accumulate against the walls of a cave where water flowed on the surface. ( 'floo-gas )

**flue gas** [MECH] The stress along one axis at a given value of strain that is required to produce plastic deformation. ( 'floo-gas )

**flue gas** [PETRO ENG] Total length of oil- or gas-well tubing or a string of interconnected tubing sections. ( 'floo-gas )

**flue gas** [GEO] A primary sedimentary structure due to water slump or flow. ( 'floo-gas )

**flue gas** [PETRO ENG] A tank which receives oil from the wellhead and gas and water may be separated before the oil is sent to a stock tank. ( 'floo-gas )

**flue gas** [PETRO] A pattern of an igneous rock that is formed when the stream or flow lines of a once-molten material show a parallel arrangement of prismatic or tabular crystals. ( 'floo-gas )

**flue gas** [Also known as fluidal texture.] ( 'floo-gas )

**flue gas** [ENG] A device used to measure the flow of fluid in pipes and convert the results into proportional signals that can be transmitted to distant receivers or controllers. ( 'floo-gas )

**flue gas** [ENG] A valve that closes itself when the flow of fluid reaches a particular value. ( 'floo-gas )

**flue gas** [ENG] In soil, a vector point function used to describe the direction of movement of water through soil in relation to the direction of flow. ( 'floo-gas )

**flue gas** [ENG] Method of making visible the direction of fluid flow, using the fact that light passing through a fluid of varying density exhibits refraction and a change in direction of rays. ( 'floo-gas )

**flue gas** [ENG] A welding process in which coalescence of metal is achieved with molten filler metal, which is poured into the joint as the welding temperature is attained and the filler metal is added. ( 'floo-gas )

**flue gas** [ENG] Crystals that melt at 150-160°C and as an inhibitor of deoxyribonucleic acid. ( 'floo-gas )

**flue gas** [ENG] Direct current that changes in magnitude with time. ( 'floo-gas )

**flue gas** [ENG] Wave-like motion of water. 2. Height from mean sea level that a wave reaches. ( 'floo-gas )

**flue gas** [ENG] Variation of successive values in a series. ( 'floo-gas )

**fluct** [ ]

**fluctuation test** [MICROBIO] A method of demonstrating that bacterial mutations preexist in a population before they are selected; a large parent population is divided into small parts which are grown independently and the number of mutants in each subculture determined; the number of mutants in the subculture will fluctuate because in some a mutant arises early (giving a large number of progeny), while in others the mutant arises late and gives few progeny. ( 'floo-tyoo-ay-er )

**fluctuation theory** [OPTICS] The theory proposed by M. von Smoluchowski and A. Einstein which states that the scattering of light occurs in pure water because random molecular motion causes density variations which effect changes in the refraction of light. ( 'floo-tyoo-ay-er )

**fluctuation velocity** See eddy velocity. ( 'floo-tyoo-ay-er )

**flue** [ENG] A channel or passage for conveying combustion products from a furnace, boiler, or fireplace to or through a chimney. ( 'floo )

**flue dust** [MET] Fine particles of metal or alloy emitted with the gases of a smelter or metallurgical furnace. ( 'floo-dast )

**flue exhauster** [ENG] A device installed as part of a vent in order to provide a positive induced draft. ( 'floo ig-zos-tar )

**flue gas** [ENG] Gaseous combustion products from a furnace. ( 'floo-gas )

**flue gas analyzer** [ENG] A device that monitors the composition of the flue gas of a boiler heating unit to determine if the mixture of air and fuel is at the proper ratio for maximum heat output. ( 'floo-gas-an-ay-ay-er )

**flue gas expander** [MECH ENG] In a petroleum processing system, a turbine for recovering energy at the point where combustion gases are discharged under pressure to the atmosphere; the reduction in pressure drives the turbine impeller. ( 'floo-gas ik-spand-er )

**fluallite** [MINERAL]  $AlF_3 \cdot H_2O$  A colorless or white mineral composed of aluminum fluoride, occurring in crystals. ( 'floo-ay-lit )

**fluence** [PHYS] A measure of time-integrated particle flux, expressed in particles per square centimeter. ( 'floo-ens )

**fluent aphasia** [PSYCH] Aphasia in which the facility of articulation, grammatical organization, and rate of speech are well preserved, while the comprehension of language and word choice are most affected; typically caused by lesions posterior to the Rolandic fissure. ( 'floo-ent a-fay-zya )

**flufenamic acid** [PHARM]  $C_{14}H_{11}F_3NO_2$  Pale yellow needles with a melting point of 125°C; used as an anti-inflammatory drug or analgesic. ( 'floo-fen-am-ik as-ad )

**fluid** [PHYS] An aggregate of matter in which the molecules are able to flow past each other without limit and without fracture planes forming. ( 'floo-id )

**fluidal texture** See flow texture. ( 'floo-id-ay-ay-er )

**fluid amplifier** [ENG] An amplifier in which all amplification is achieved by interaction between jets of fluid, with no electronic circuit and usually no moving parts. ( 'floo-id am-pli-fay-er )

**fluid-bed process** [CHEM ENG] A type of process based on the tendency of finely divided powders to behave in a fluidlike manner when supported and moved by a rising gas or vapor stream; used mainly for catalytic cracking of petroleum distillates. ( 'floo-id-bed pray-es )

**fluid catalyst** [CHEM ENG] Finely divided solid particles utilized as a catalyst in a fluid-bed process. ( 'floo-id kat-ay-ay-er )

**fluid catalytic cracking** [CHEM ENG] An oil refining process in which the gas-oil is cracked by a catalyst bed fluidized by using oil vapors. ( 'floo-id kat-ay-ay-er )

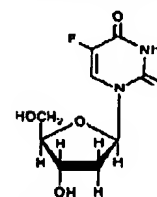
**fluid clutch** See fluid drive. ( 'floo-id klach )

**fluid coal** [MATER] Pulverized coal that, when mixed with air, can be transported through pipes. ( 'floo-id kol )

**fluid coefficient** [PETRO ENG] A measure of the flow resistance to the leaking off of reservoir fracturing fluids into the formation during the fracturing operation. ( 'floo-id koef-ay-ay-er )

**fluid coking** [CHEM ENG] A thermal process utilizing the fluidized solids technique for continuous conversion of heavy, low-grade petroleum oils into petroleum coke and lighter hydrocarbon products. ( 'floo-id kock-ing )

## FLOXURIDINE



Structural formula of floxuridine.

n record

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transfer check | 2053

nd See change record. (tran'sak-shən ,rek

See change tape. (tran'sak-shən ,tāp)

[ELECTR] A specific measure of transfer a given set of conditions, as in forward trans-electrode transmittance, short-circuit trans-signal forward transmittance, and transadmission ratio. (tranz'ad-mi-tions)

[BIOCHEM] One of a group of enzymes that transfer of the amino group of an amino acid to another amino acid. Also known as aminotransferase. (tranz'am-e-nās)

[CHEM] 1. The transfer of one or more amino compound to another. 2. The transposition of within a single compound. (tran,sam'e-nā)

[VIROL] Change in the capsid of PARAEPLICATION of adenovirus from one type of other. (tranz,kap'se-dā-shən)

[COMPUT SCI] A device which transmits and receives data to punch card; it is essentially a switch which at the sending end reads the card and over the wire, and at the receiving end punches it. [ELECTR] A radio transmitter and receiver unit and having switching arrangements such as one or more tubes for both transmitting and known as transmitter-receiver. (tran'se-ver)

[LINK] [COMPUT SCI] Integrated data process-punched cards, using transceivers as terminal transmission path can be wire or radio. (tranz'liŋk)

[MATH] A transcendence base of a field  $F$  is a subset  $S$  of  $E$  which is algebraically independent over  $F$  and is not a proper subset of any other subset algebraically independent over  $F$ . (tran'sen-dens)[MATH] The transcendence degree of a subfield  $F$  is the number of elements in a set of  $E$  over  $F$ . Also known as transcendence dimension. (tranz'sen-dens di-grē)

[MATH] See transcendence degree. (tranz'sen-dens)

[MATH] The graph of a transcendental function. (tran'sen-den-tal 'kōrv)

[MATH] An element of a field  $K$  is transcendental over a subfield  $F$  if it satisfies no polynomial equation with coefficients in  $F$ . (tran,sen'den-tal 'el-e-mēnt)[MATH] A field extension  $K$  of  $F$  is transcendental if  $K$  is not algebraic over  $F$ . (tran,sen'den-tal 'fild ik-sen-shən)

[MATH] Functions which cannot be expressed algebraically involving only the variables. (tran,sen'den-tal 'fōŋk-shənz)

[MATH] An irrational number that cannot be expressed as a ratio of two integers. (tran'sen-den-tal 'nūm-bər)

[MATH] In an expression, a term that is not solely by numbers and algebraic symbols. (tranz'tērm)

[ELECTR] An electron-tube razing, equal plate current divided by the change in control grid voltage, when the plate voltage and all other grid voltages are constant. Also known as grid-anode transconductance; mutual conductance. (tranz'kon-dak-tāns)

[MATH] A ballistic missile is a self-propelled missile (usually a rocket or a guided missile) that travels at least 12,500 miles (20,000 kilometers), so that it can reach any point on the earth's surface and reach its target. (tranz,kīn-tōn 'en-tel bō-lis-tik 'mī-səl)

[COMPUT SCI] To copy, with or without translating, data from one computer storage medium to another. (tranz'kōpi)

[COMPUT SCI] The equipment used to convert data from one form to another, as for converting computer data from one medium and language used by the computer. (tranz'kōn-vert)

transcriptase See ribonucleic acid polymerase.

(tran'skrip,tās)

[ENG ACQUIS] A 16-inch-diameter (40.6-centimeter), 33 1/3-rpm disk recording of a complete radio program, made especially for broadcast purposes. Also known as electrical transcription. (mol bio) The process by which ribonucleic acid is formed from deoxyribonucleic acid. (tranz'krip-shən)

[MOL BIO] The segment of deoxyribonucleic acid between the sites of initiation and termination of transcription by ribonucleic acid polymerase. (tranz'krip-shən ,yū-nai)

[MET] Across the crystals of a metal; used of cracks in metals. Also known as intracrystalline; transgranular. (tranz'krist-ō-l-ēn)

[GEOL] A strike-slip fault characterized by a steeply inclined surface. Also known as transverse thrust. (tranz'kō-tant 'fōlt)

[ENO] Any device or element which converts an input signal into an output signal of a different form; examples include the microphone, phonograph pickup, loudspeaker, barometer, photoelectric cell, automobile horn, doorbell, and underwater sound transducer. (tranz'di-sē)

[ELECTR] The ratio of the power available to a transducer from a specified source to the power that the transducer delivers in a specified load; usually expressed in decibels. (tranz'di-sē ,lōs)

[MOLEC BIO] Transfer of genetic material between bacterial cells by bacteriophages. (tranz'dak-shən)

[MAGNETISM] See magnetic amplifier, saturable reactor.

(tranz'dak-tor)

[SCI TECH] To cut across, or to cut transversely.

(tran'sekt)

[ORG CHEM] Conversion of an organic acid ester into another ester of that same acid. (tranz'ster-o-fē-kā-shən)

[GEN] Infection of a cell with viral deoxyribonucleic acid or ribonucleic acid. (tranz'fek-shən)

[COMPUT SCI] See jump. [MIN ENG] A vertical or inclined connection between two or more levels, used as an ore pass. (NAV) 1. The distance a vessel moves perpendicular to its initial direction in making a turn of 90° with a constant rudder angle. 2. The distance a vessel moves perpendicular to its initial direction for turns of less than 90°. (tranz'fer)

[ELECTR] An admittance rating for electron tubes and other transducers or networks; it is equal to the complex alternating component of current flowing to one terminal from its external termination, divided by the complex alternating component of the voltage applied to the adjacent terminal on the cathode or reference side; all other terminals have arbitrary external terminations. (tranz'fer ad-mi-tions)

[BIOCHEM] Any of various enzymes that catalyze the transfer of a chemical group from one molecule to another. (tranz'fē-rās)

[DES ENG] A caliper having one leg which can be opened (or closed) to remove the instrument from the piece being measured; used to measure inside recesses or over projections. (tranz'fer ,kal-ə-pər)

[MIN ENG] A quarry car provided with transverse tracks, on which the gang car may be conveyed to or from the saw gang. (tranz'fər ,kār)

[MATH] See transition card. (tranz'fər ,kārd)

[MECH ENG] In a vehicle with more than one driving axle, a housing fitted with gears that distribute the driving power among the axles. (tranz'fər ,kās)

[ENO] In plastics processing, a vessel in which thermosetting plastic is softened by heat and pressure before being placed in a closed mold for final curing. (tranz'fər ,chām-bər)

[ELECTR] 1. Relation, usually shown by a graph, between the voltage of one electrode and the current to another electrode, with all other electrode voltages being maintained constant. 2. Function which, multiplied by an input magnitude, will give a resulting output magnitude. 3. Relation between the illumination on a camera tube and the corresponding output signal current, under specified conditions of illumination. (tranz'fər ,kar-ik-tē-ris-tik)

[COMPUT SCI] Check (usually automatic) on